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ABSTRACT

A seminar was held in Alexandria (Egypt) to bring together African university presidents, vice-chancellors, rectors, and top-level administrators to discuss the following themes: privatization, entrepreneurship, policies of international financial institutions with regard to African universities, and regionalization and the establishment of networks among African universities. This proceedings document summarizes the presentations made and the discussion that took place in these theme areas. Appendixes provide "The Alexandria Statement on the Resources and Management of African Universities," which presents the participants' views; the texts of three seminar presentations; a list of reference documents; and a list of participants. (JDD)

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Priority: Africa

Programme of Action proposed by the Director-General
(1990-1995)

Development of higher education in Africa

ALEXANDRIA Seminar
(26 - 30 April 1993)

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PRIORITY AFRICA PROGRAMME

REPORT

Development of Higher Education in Africa

**The ALEXANDRIA Seminar
on the
Resources and Management of the African University
26 - 30 April 1993**

**In co-operation with
the Association of African Universities (AAU)**

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HISTORICAL BACKGROUND

Over the past ten years, a deeper insight has been sought into the situation of higher education in Africa. The subject has been on the agenda of a number of high-level meetings involving all African Member States. These meetings have examined trends and issues and made recommendations for a special programme of action as indicated below.

Organized by UNESCO with the co-operation of the Organization of African Unity and the Economic Commission for Africa, the fifth Conference of African Ministers of Education and those responsible for Economic Planning was held in Harare in July 1982. It had on its agenda an item devoted to consideration of the role of higher education in national development. Particularly, attention was focused on the part which African Higher Education should play in training indigenous skilled personnel in the development-oriented scientific and technical research in preserving cultural identity, and promoting the cultures of African peoples and in modernizing educational systems.

In the Declaration adopted at the close of the Conference, African Member States resolved to strengthen their co-operation in the sphere of higher education. Specific recommendations were made regarding the development and modernization of higher education. In particular, the Conference recommended that UNESCO should "carry out a Special Programme on the future of higher education in Africa with a view to raising the standards of instruction, promoting the collective use of trained personnel and potential, and coordinating the higher education policies of African Member States" (Recommendation no. 8).

Since the adoption of this declaration, many activities have been undertaken by such organizations as the Association of African Universities (AAU), the United Nations Economic Commission for Africa (ECA), the World Bank, the Commonwealth of Learning, the Association of Commonwealth Universities, the Agency for Cultural and Technical Co-operation (ACCT), the Association des Universités partiellement ou entièrement de langue française (AUPELF), the Conseil africain et malgache pour l'enseignement supérieur (CAMES) and other NGOs interested in the development of higher education in Africa. Various aid agencies, foundations and institutions have also been active in extending support to the development of national systems and to individual institutions of higher education in Africa.

As far as UNESCO is concerned, between 1983 and 1987, a series of activities were carried out, in co-operation with the UNESCO Regional Bureau for Education in Africa (BREDA) to define the general thrust of the proposed special programme, identify its main features, and select the methods of action to be used. In October 1984, a regional Advisory Committee for Higher Education in Africa was created, with responsibility for advising on the strategy to be adopted to carry out the programme.

This Committee identified two main priority lines of emphasis, namely,

- i) the pedagogical and scientific training of higher educational personnel, and
- ii) the production of documents and text-books for higher education.

Practical suggestions encompassing other fields of interest for higher education in Africa, were made by a regional symposium on higher education held in BREDA, Dakar, in May 1987.

Critical assessment of the situation

Specific studies and field activities conducted since 1983 have shown that the unsatisfactory situation of higher education in Africa, was the result of the combined effects of a range of factors such as those described below.

Economic difficulties at the national level have led frequently to drastic financial constraints limiting seriously the resources allocated to higher education generally and to universities in particular at a time when the demand for higher education has been at a high level.

The lack of professional training. There is often a dearth of qualified experienced teachers.

Absence of a clear-cut higher education policy and of a clear definition of the tasks which higher education should undertake to contribute to the search for solutions of development problems. As a consequence, study and research programmes are not always relevant to the socio-cultural situation in the country nor do they always match the economic development efforts being exerted.

There is a lack of motivation among teaching staff whose status and remuneration are felt to offer little incentive. The lack of motivation is also present among students whose general behaviour reflects the uncertainties and apprehension aroused by the dismal employment prospects facing them.

Efforts of harmonization, coordination and collaboration in framing higher education policies for the different African States are lacking.

GENERAL STRATEGIES
FOR THE IMPROVEMENT OF HIGHER EDUCATION IN AFRICA

I. STRUCTURE FOR THE SPECIAL PROGRAMME

The Special Programme for the improvement of higher education in Africa consists of activities organized either in the form of projects or sequential series implemented under a regional co-operation mechanism. It gives support to action at the national, sub-regional and regional levels.

At the sub-regional level plans have been made to set up 5 programme-based networks : two in West Africa, one in Central Africa, one in East Africa and one in Southern Africa. Each programme network will be supported by a centre of excellence at a university where resources needed for the programme will be assembled. Three priority strategic areas have been identified namely : training, scientific and educational documentation and joint utilization of resources. In each of these areas, the special programme will pursue specific objectives and make use of appropriate modalities of action.

II. ACTION UNDER THE PRIORITY AFRICA PROGRAMME

The programme Priority Africa was established by the Director-General and approved by the General Conference of UNESCO (25C/Resolution 27) as a contribution to the implementation of the United Nations Programme of Action for African Economic Recovery and Development. Concerning higher education, the Director-General stated in the Priority Africa programme :

"I have reached the conclusion that the main lines of the priority assistance that UNESCO could be asked to provide in the area of higher education are the following:

(a) action - at the initial training stage and through in-service training - to raise the level of teaching personnel;

(b) improvement of the quality of research conditions and facilities (computer equipment, subscriptions to scientific and technical journals and to data banks);

(c) modernization of the storage, monitoring, management and exploitation of scientific and technical information, through appropriate equipment and high-quality staff;

(d) improvements in both the quality and professional efficiency of university management and administrative personnel;

(e) revision of the content of curricula and teaching equipment with the aim of making them more relevant to the problems of economic and social development - to be undertaken in all subjects, with particular emphasis on scientific and technological subjects and on the development of the social sciences;

(f) help to governments for the improved planning of the scholarships they award, with particular reference to ensuring that the courses of study followed by African students abroad are relevant to the needs and problems of their own countries and qualify them for employment on their return to Africa;

(g) strengthening the capacity of universities to communicate among themselves, whether through the promotion of joint activities, through exchanges of teaching staff or students, through participation in joint research projects, through the free and rapid circulation among them of the teaching tools and data they possess, or through co-ordination to avoid duplication involving a negotiated regional division of specializations, whereby - as a result of a clear definition of priorities - increased resources could be made available so as to achieve international standards of excellence;

(h) efforts to help African universities break out of their too frequent isolation by bringing them into contact with the cultural, scientific, technological, economic and industrial communities of other regions.

This array of measures, all of which are aimed at an optimal use of university resources and potential, could be carried out under two existing institutional mechanisms. These are the committee set up in 1987 to advise me on strategies for improving the quality and relevance of higher education in Africa and the special programme for the improvement of higher education in Africa, currently under consideration by UNDP, which provides for a regional mechanism for implementing projects aimed at strengthening the scientific and technological potential of higher education institutions."

For the planning of this programme, AAU convened in Accra, from 1 to 2 November 1990, at the request of UNESCO, a preparatory meeting of experts from universities and donor agencies. As a result of their deliberations, a programme outline was drawn up focusing on three major themes :

1) Mission

Higher Education Institutions: nature and functions

- Higher Education: past, present and major trends

- The African Higher Education Institution: history, philosophy, issues and environment
- Possible Agenda for Higher Education Institutional Development in Africa.

2) Function

Leadership and Organization of the Higher Education Institution:

- Charters and Structures
- Decision making and policy formation
- Communication and Interaction within the institution
- Research.

3) Efficiency

Resource Planning/Allocation and Cost Effectiveness:

- Higher Education Financing : trends
- Institutional quality, relevance and effectiveness
- Use of impact of new information and communication technologies
- Networking for efficiency
- Evaluation strategies.

It was envisaged to organize a modular series of reflection and training workshops of 5 days duration each for some 40 university rectors, vice-chancellors and presidents of African universities (one university per Member State of the African region). The first workshop was held in Accra (Ghana) from 25 to 29 November 1991. The second workshop took place in Dakar (Senegal) from 19 to 24 November 1992 and the third one in Alexandria (Egypt) from 26 to 30 April 1993. Logistic support for the organization will be assured on a contract basis with the UNESCO national commissions and the host universities in the respective countries. The AAU, as well as intergovernmental and non-governmental organizations which are active in supporting Africa Higher Education will be involved in this undertaking.

By bringing together a specific target audience of African university presidents, vice-chancellors, rectors and top-level administrators, the seminars aim at forging a consensus of views and concerted plans for action in these areas.

The conclusions and recommendations of each seminar will be incorporated in a plan of action which will complement existing initiatives in the field of development of African higher education.

THE ALEXANDRIA SEMINAR
ON THE RESOURCES AND MANAGEMENT OF THE AFRICAN UNIVERSITY
26 - 30 April 1993

OPENING SESSION on 26 April 1993

The opening session took place in the Alexandria Conference Centre. Present were Professor Donald Ekong, Secretary-General of the Association of African Universities, 27 Vice-Chancellors, Rectors and other personnel of African universities, four educators from Ministries of Education, observers from the Conseil africain et malgache pour l'enseignement supérieur, the Senghor International University of Alexandria, the Organization of African Unity, the African Development Bank and the UNDP. The full list is appended as Annex V.

The opening session was addressed briefly by the Secretary-General of the Association of African Universities. He was followed by Professor I.A. Ebeido, Vice-President of the host university, Mr Eric Armerding, Director of UNESCO's Priority Africa Programme, representing the Director-General of UNESCO, and by Dr Essam A. Salem, President of the University of Alexandria, who formally opened the Seminar.

Professor Ebeido looked ahead to the twenty-first century and expressed his belief that adequate education would equip the countries of the continent to deal with socio-economic problems which hinder development. He recalled the questions examined at the Dakar Seminar in November 1992 and underlined that recruitment of teaching and research personnel is among the most important concerns which the four themes for the Alexandria Seminar would cover. He referred to UNESCO's interest in upgrading university education, which stood behind the Seminar he was speaking to and other engineering conferences he had been privileged to attend. He ended by referring to the University of Alexandria, established in 1942, and its task of providing educational services to three "Governorates" lying west of the Nile delta through its twenty-two faculties. He wished participants and their guests a successful seminar and a happy stay in Egypt.

Mr Eric Armerding passed on the regrets of Mr Federico Mayor, Director-General of UNESCO, for not being able to be present at the final seminar of the series, the first of which he addressed in November 1991 at Accra, Ghana. Mr Mayor hoped that the conclusions of the meeting and of the two preceding ones would provide a basis for proposals that would be presented to a Conference of Ministers of Government responsible for Higher Education. The hope was founded on the unambiguous expression

of interest by the Organization of African Unity as was confirmed in its resolution on the strengthening of the role of African Higher Educational Institutions and Universities in the development of Africa adopted in Dakar in July 1992.

Mr Armerding conveyed the Director-General's thanks to the Government of Egypt and the authorities of the University of Alexandria for agreeing to host the Seminar. "Nor should we be oblivious of the people of Egypt", Mr Armerding stated, "those who will in one way or another help us this week by their service, their courtesy, and above all, by the inspiration with which they will assist us to draw from their entire land and its contribution to the World Heritage. We thank them in advance for the privilege of being among them even if, in the course of our assignment, we seem to withdraw from time to time". The full message delivered on behalf of the Director-General is in Annex I.

In formally opening the Seminar, Dr Salem stated:

It is my pleasure to welcome you to this Seminar on the Resources and Management of the African University organized by UNESCO and taking place in co-operation with the University of Alexandria. That this Seminar is taking place here is an indication of Egypt's role in the service of the African continent and that of the University of Alexandria in its strong co-operation with African universities.

I seize this opportunity to express my sincere appreciation to the Association of African Universities of the productive co-operation with the University of Alexandria in supporting and organizing this important seminar. No doubt, today's Seminar touches on very important and public issues which not only affect African universities but correlate with higher education policies in African countries as well.

Let us now focus on the topics before us: Universities, privatisation, the role of the University for the societies, regionalization and networking between African universities.

It is right to say that it has been decided in Egypt to establish private self-financing universities on the condition that programmes of teaching and research should be at a high international level on the one hand and able to respond to the new demands of the world market and new specializations on the other hand.

Concerning the role of the Universities in serving society, I should like to assure you that Egyptian Universities have been complying with this principle over a long period. Egyptian Universities have established many units with private teachers who pay attention to solving problems which governments and establishments face in the sector of production services.

This is but an account of the Egyptian university experience which I invite you to consider in your discussions.

We look forward, Ladies and Gentlemen, to knowing more about the very important work to be done for the uplift of the African continent through strong co-operation between African universities.

PROCEEDINGS

With the Seminar formally opened, the following officers were elected:

President	Professor I. A. Ebeido
1st Vice-President	Professor Jeanne Dina
2nd Vice-President	Professor N. Alao
Rapporteur	Professor W. Ochieng

FIRST PLENARY SESSION

The first plenary session was presided over by Professor EBEIDO, as Chairman. Mr Eric Armerding presented the objectives and programme of the Seminar.

Presentation of the Objectives and Programme of the Seminar

In his statement, the full text of which is in Annex II, Mr Armerding set out the main theme which the Seminar needed to consider. He suggested that the cues for action and how to take that action were management and cost-effectiveness, referring to the guidance that would be found in the Dakar Report and the University of Bradford Management Centre paper, "Achieving A State of Readiness for Diversification of Funding: Privatisation". He posed some nine questions and suggested three challenges: the challenges of the needs of the student and graduate, the primary beneficiaries of the choices the Universities make; how to bring the university to a state of readiness to be cost-effective, and the question of the kind of management that must be in place by the fiftieth anniversary of UNESCO in 1996 and beyond to the year 2000.

Sub-theme 1 - Privatization

The challenge under this heading, Mr Armerding suggested, was: How the African university can, to use the words of the Bradford University Management Centre paper, successfully address its own, and the African, condition and thereby enable - not only the human product of its work, the graduate, but the entire

human resources it develops - to manage change and, in the process, achieve diversified funding, including private sector support. What business plans and management action the African University can unambiguously present to the potential individual or group donors - and these must know what to expect in return - requires serious consideration. There lies the fourth challenge to the African University.

Sub-theme 2 - Entrepreneurship

Under this heading, Mr Armerding posed the question as to whether the traditional view of the university as change-resistant is not tending to become a self-perpetrating myth which has to be unravelled in the face of the pressing need for change as well as the maintenance of cultural integrity in the midst of change. An implication of such examination might well be a sure place for entrepreneurship in the African Universities. He drew attention to the success stories of Professor F.O. Kwami's paper, Universities and Entrepreneurship, in particular the Industrial Technology Transfer Unit of the University of Science and Technology and its five centres in Ghana recently allocated the sum of \$3 million by the UNDP.

Mr Armerding suggested that the Bradford Management Centre paper and that of Professor Kwami should guide discussion towards appreciating the fact that entrepreneurship implies new applications of management, the demands of which would constitute the fifth challenge to the African University. There was the need, however, for a broader definition of the topic to include the development of the culture of entrepreneurship.

Sub-theme 3 - Policies of Financial Institutions with regard to African Universities

Professor Afif Hendaoui's paper, Policies of Financial Institutions towards African Universities, Mr Armerding pointed out, provided a basis for discussion of the sub-theme. He posed seven questions for consideration, among them, the extent to which the five-point orientation on which the World Bank bases its recommendations accord with not only the felt but also the real needs of African universities.

Sub-theme 4 - Regionalization and the Establishment of Networks among African Universities

The sixth challenge lies in the implications of meaningful regionalization as an enterprise to be run by those in charge as entrepreneurs, trained to apply innovative management to improve and market service with consequent cutting down of fattened secretariats and putting a premium on productivity in staff

selection and retention. If there is an alternative to this, then it must be made known and examined.

As pointed out in the paper of Professor K.F. Seddoh, universities and their countries may have drifted into regional arrangements. The challenge for the Seminar was not only to provide guidelines for redressing the balance, which take cognizance of those which emerged at the Accra Seminar in 1991. It was also to establish the most cost-effective new technologies for managing regionalism and net-working as well as to earn and create the necessary financial support and basis for it.

Conclusion

Summing up, Mr Armerding stated that, in the final analysis, the way forward must be in innovative, efficient and entrepreneurial management which will compel outside bodies to recognize rejuvenation where it exists, and performance when it takes place, in discharging a mission which all partners in the enterprise of the university have accepted.

The Seminar turned, in subsequent plenary sessions, to a discussion of the sub-themes, taking each of them after the paper written on it had been presented as set out below.

Second and Third Plenary Sessions

Sub-theme I : Privatisation

Presenter : Frank L. Bartels, Research Fellow, Management of Bradford Management Centre and co-author of paper, Achieving a State of Readiness for Diversified Funding: Privatisation

Fourth Plenary Session

Sub-theme 2 : Entrepreneurship

Presenter : Professor F.O. Kwami, former Vice-Chancellor of the University of Science and Technology, author of Universities and Entrepreneurship

Fifth Plenary Session

Sub-theme 3 : Policies of Financial Institutions with regard to African Universities

Presenter : Professor A. Hendaoui, Recteur, Université de Tunis III, author of paper, The Policies of International Institutions towards African Universities

Sixth Plenary Session

Sub-theme 4 : Regionalization and the Establishment of Networks among African Universities

Presenter : Professor K.F. Seddoh, Recteur, Université du Bénin (Togo) author of paper Regionalization and Networking among African Universities

Seventh Plenary Session

Subject : New Technologies and Inter-University Co-operation

Presenter : Mme Régine Thomas, Chargée de Mission, Ministry of Foreign Affairs, France.

Closing Session

In the course of the closing session on Friday 30 April 1993 the Seminar adopted a summary of its views and discussions entitled, The Alexandria Statement on the Resources and Management of the African Universities. It is reproduced below, after the reports on the presentations and discussion of the sub-themes, prepared by the authors of the relevant papers which led to the Statement.

SUB-THEME 1 - PRIVATISATION

Mr Frank Bartels of the University of Bradford Management Centre introduced the paper "Achieving a State of Readiness for Diversified Funding: Privatisation"

He illustrated the key points with overhead transparencies. These comprised: Title of Paper; Foreign Direct Investment (Average Flows by Region); Pre-requisites for successful Privatisation; Forces Incident on Organizational Enterprise and Strategic competitive Proaction; The Academic-Private Sector Partnership (Pathways to Generating Income from the Private Sector), and the following response of Professor Peter F. Drucker to the question, What is Management?

"Management is about human beings. Its task is to make people capable of joint performance, to make their strengths effective and their weaknesses irrelevant. This is what organization is all about, and it is the reason that management is the critical, determining factor... FINALLY, THE SINGLE MOST IMPORTANT THING TO REMEMBER ABOUT ANY ENTERPRISE IS THAT RESULTS EXIST ONLY ON THE OUTSIDE. The result of a business is a satisfied customer. The result of a hospital is a healed patient. THE RESULT OF A SCHOOL IS A STUDENT WHO HAS LEARNED SOMETHING AND PUTS IT TO WORK TEN YEARS LATER."

To this quotation Mr Bartels added, "The result of the African University is a graduate who has learned something and puts it to work immediately to advantage."

Other points stressed, which can be identified in the paper as indicated, where necessary, below in brackets, were:

- a) The privilege of engaging in creative activities accorded to African university personnel at this material point in time when the continent is in danger of being marginalized (whether deservedly or not).
- b) The need for the universities to internalize within the managerial and intellectual space :
 - i) the urgent requirement to change for the better the image of African higher education institutions which has been produced and is being perpetuated;
 - ii) the fact that without that change a request or an approach to outsiders for funds is unlikely to have maximum chances of success, and
 - iii) the serious implications of that image if not reversed. (para. 4, 20 to 25, 41)
- c) While the Seminar could testify to successes in African universities, it had been convened to discuss the need for change, what change, how the change might be secured and why one kind of change and not another.
- d) The required change in turn:
 - i) necessitated a different perspective as to what the MISSION of an African university means, implies and demands as distinct from, but closely related to its mandated functions which it shares with practically every other university in the world, and
 - ii) called for a new look at how a university performs under the guidance of its MISSION. (Para. 19, 60(d), 61, 84, 123)
- e) The broad definition of:
 - i) privatisation as the diversification of the sources of funds to secure increasing non-governmental, that is non-public sector, financial and material inputs into university academic and administrative work; (Para. 8)
 - ii) development as growing self-sufficiency based on national human and material resources and self-directed in a way which integrates external assistance into the fabric of national effort. (The Challenge to The south, The South Commission, pp. 10-11)

- f) The threat of marginalization of Africa from global participation and its economic dynamic which, while being serious in itself, should be closely examined for indications of:
 - i) the role African universities may be able to play in a process of recovery;
 - ii) the drive for privatisation, (Para. 3, 125) and
 - iii) both potential and process being a resource to be managed by African universities to advantage. (Para. 40)
- g) The kind of managerial processes, posture and offering by the African University which will permit its drive for privatisation and approach to the private sector to have the maximum chances of success. (Para. 9 to 16)
- h) The crucial importance to the African university of a managerial attitude of effectiveness and efficiency towards its performance in areas where finances do not constitute a major problem (Para. 23)
- i) The paper and its emphasis on doing the right things and doing those things right, being considered as:
 - i) a part of the emerging strategic and operational efforts being made by the African universities themselves to invent, organize and manage their way out of the crisis defined at the Accra and Dakar seminars. (Para. 7, 27)
- j) The need to regard, unequivocally, the university as a preferred route for national economic transformation and to see it as a regular and established component of the national system of economic exchange and wealth creation. (Para. 36, 37, 117)
- k) The pre-requisites for successful privatisation:
 - i) developing a greater measure of self-sufficiency which will, among others, enhance the African University's control over, and independence in, setting its own agenda and speaking to its national and international audience with an integrity that commands support with regard to privatisation; (Para. 18, 22, 26 to 31, 38 to 40, 47)
 - ii) developing the Customer/Client orientation to enable the African University to know better, and understand fully, the needs of those to be approached for assistance through academic-private sector partnerships. (Para. 51, 53)

- iii) owning a target for diversification of funding not only in terms of a time-frame but also of sources that will give meaning to the drive for privatisation. (Para. 63 to 64)
- l) The implication of the Dakar Statement underlining:
 - i) the application of innovative, entrepreneurial, effective and efficient management; (Para. 46, 48)
 - ii) the adoption of an audit posture, a crucial step towards making privatisation a success; (Para. 51, 58)
 - iii) correcting such unfavourable views of higher education in Africa as have come through some recent studies;
 - iv) actualizing the diversification of funds; (Para. 59 to 61), and
 - v) setting a realistic target to be aimed at in the privatisation process. (Para. 65 to 66)
- m) The obligation which a target imposes on the university concerned to have something to offer which will inspire a willingness by outsiders to "buy into", and become part and parcel of the processes at work in the University. (Para. 67 to 68)
- n) The creation of the necessary analytical framework for achieving privatisation (Para. 71 to 84), bearing in mind, among others:
 - i) a Business Plan and Management Action;
 - ii) a campaign aimed at a specific target audience, and
 - iii) the external management of people and organizational relations. (Para. 94)
- p) The information intensive character of the preparation required by the task mentioned above.

A lively debate ensued. Responses to the content of the paper varied from the cautious to the receptive. Some participants thought that the paper was somewhat "abstract", "theoretical", "non-practical", in "danger of generalities", and took insufficient cognizance of the realities of the African situation. A participant thought that the paper represented a "source of attitudes to Africa which is objectionable", "the term the African University was objectionable", and that "the basic attitude of the paper was unacceptable and made by people who do not run universities". A second participant thought that there could not be an orientation to the customer if it was not carried out through the State.

Other participants thought the paper apposite to the condition of the African University. In this connection, Kordofan University, Sudan, was mentioned as "doing this (what is in the paper) without giving it a name". University of Bulawayo, Zimbabwe, reminded participants of the 1987 AAU Harare Conference of Vice-Chancellors which had agreed to the principle of "privatisation". He submitted that "it was possible (to privatise) despite all the problems and, in the process, to compete for support from the private sector", as emphasized by the paper. Université de Tulear, Madagascar, was cited as "actually engaged in doing what the paper said".

"Surprise" was expressed that, despite the concept of privatisation, as defined in the paper, having emerged from the response of Vice-Chancellors and Rectors of African universities to the crisis of their universities at the previous two seminars, the ideas and suggestions advanced in the paper were being considered somewhat alien and not practical by some participants at Alexandria. It was stated that in the case of the Université de Tulear, Madagascar, the approach, processes, management posture and attitudes suggested in the paper were consonant with the "experience of their response to diversification of sources of funding".

Other interventions and questions are summarized below together with paragraphs of the paper, in brackets, which specifically address the points made:

a) A detailed description of the response to the crisis in the particular case of the Université de Tulear, Madagascar. The account of the process of their diversification of sources of funding highlighted :

- i) the need to seek actively solutions to specific as well as general problems as a direct outcome of the UNESCO Seminar Series;
- ii) the privatisation of catering, which hitherto had been consuming approximately 60% of management time, in order to free management and reduce, if not eliminate, the overt subsidy of students' food which, anyway, was being traded on the open market by students for profit;
- iii) the decision, and process, to select smaller numbers of students via increasingly autonomous administrative councils, thereby increasing quality and reducing administrative problems. To facilitate the process, an education campaign aimed at parents and students to sensitize these clients to the features and benefits of privatisation was carried out at the same time;
- iv) the necessities and expectations of privatisation which were all to be found in the paper; (Para. 87 to 90, 91 to 116, 118, 120, 123, 124)

- v) the establishment of partnerships with private economic operators: to enable the university to provide "à la carte" training, and future income generating activities such as transport enterprise related to the tourism and hotel industry and aquaculture; (Para. 95, 102 to 112)
- vi) the increasing use of "salesmanship" by the university management to project their skills and assets in order to participate, through tendering and other means, in government infrastructural building and environmental work programmes; (Para. 77, 89)
- vii) the challenges to their process of privatisation to be found in: the prevailing mentality of a minority, but important group, of staff which militated against performing effective and efficient management practices; the structure of management responsibilities, administrative duties, authority and accountability which tended to result in problems being solved by, or directed to, the "top person" rather than through a process of accountable line management delegation; student strikes, and a reluctance to accept short-term sacrifices for long-term identifiable gains. All of these challenges were being met and tackled by managing change through a combination of: restructuring university decision-making bodies to reduce the stifling influence of the minority of staff reluctant to adopt new attitudes; organizing seminars to explain the need for, and allow, the acquisition of managerial skills, and inculcating entrepreneurial attitudes; (Para. 47 to 48, 72)
- viii) the need for an enabling "political will to see the job through", which should not only emanate from the government but also from the management of the university concerned.

b) The need to have as full a picture as was possible of the circumstances and conditions pertinent to African universities. (Para. 59 to 60), 74 to 80, 86)

c) The suggestion that the process of privatisation as defined, and understood, should be "piloted" in some universities and studied for some 10 to 15 years to permit a fuller appreciation of privatisation.

d) Each university had to examine its local environment and there is not one single solution to be applied to all. (Para. 43) However, the term the African University is not inappropriate because, as had emerged in the Seminar series, the same pattern of problems is to be found in all African universities. There are more similarities than differences, in the features and expressions of the pattern.

e) The affirmation of the Dakar Statement that, in facing up to the crisis defined at the Accra Seminar, diversification of sources of funding which defined privatisation was the direction to take while ensuring that :

- i) the most appropriate partners participate, and
- ii) their participation correspond with the "life-style" of the university in question. (Para. 84 to 85)

f) The need to examine :

- i) what would be gained from privatisation as far as students were concerned, and
- ii) how privatisation could help universities to put an end to the phenomenon of the "brain-drain".

g) The identification, by the University of Namibia, of the business of the Vice-Chancellor in African universities as being concerned with cost-savings and time-savings as well as the fact that there is a "great deal to be done via good house-keeping". Innovative ways of achieving these goals and meeting the challenge of reduced or low government disbursements included :

- i) the use of private sector security companies for campus security (while retaining the management of the monitoring of the company's performance);
- ii) the partnership between the university in question, its students as mortgagees, and private sector construction companies to build much-needed student accommodation to be paid for overtime, and
- iii) the examination of the university transport set-up as to ways and means to privatise its provision.

h) The view that privatisation would need to take into consideration the fact that the Vice-Chancellor of an African university is a combination of academic manager, chief executive officer, chief operating officer and "mayor" of a community.

i) The need to:

- i) use the discussions on management, in the seminar series, to direct proposals towards mitigating the effects of upheavals in African States, and
- ii) investigate individual cases, particularly of those universities further along the pathways to generating income from the private sector, to illustrate, and to share, general solutions to, and specific ways out of, the funding crisis. (Para. 43)

j) That legal mechanisms are required to permit the establishment of private universities, that is, universities entirely funded from non-governmental sources.

k) The "mentality of personnel" in African universities which could be described as viscous and which was producing corporate and organizational drag and therefore preventing the transformation of operative personnel from administrators to managers. (Para. 69 to 70)

l) The uncertainties surrounding the appointment of managerial personnel as well as the position of the Vice-Chancellor in some African universities, tenure being a case in point.

m) National private sectors are small and Foreign direct Investment is, generally speaking, volatile as it depends on the situation of the economic cycle through which the country is passing. (Para. 3)

n) Other potential problems in cost-effective and cost-efficient aspects of privatisation which were identified as:

- i) difficulties in reducing numbers of staff, administration and labour;
- ii) the challenge to change the popular perception of higher education from one of universal right for all irrespective of extant financial, material and space constraints to one of competitive access to improve quality and optimise national resources allocation and utilisation, and
- iii) legislative difficulties. These were deemed to require detailed studies.

o) The need to collate information for producing and disseminating case studies on privatisation. This was to be followed up, if appropriate, by a skills and knowledge workshop on creating the right capacity and improving specific capabilities for managing the processes involved in privatisation.

A number of specific questions for information were asked, among them:

- a) Into what categories can the privatisation figures mentioned in the paper (Para. 63 to 64) be broken down?
- b) What is meant by training "à la carte", the privatisation of university management in the sense of the inculcating of innovative, entrepreneurial, effective and efficient management and how to accomplish the task. For example, how does a university go about privatising catering or managing joint research projects? (A participant indicated the

change in circumstances which had led this university being called upon by national government to fill the gap left by a withdrawal of Official Development Assistance. He emphasized:

- i) increasing reliance on local staff;
- ii) approaches to local private sector and Alumni for support, (Para. 91) and
- iii) the increase in government contributions partly in recognition of the way in which the university had risen to the challenge).

The pattern of interventions and issues they raised clearly reflected the reality that some African universities are further along the pathways to generating private sector income in their strategy for diversification of sources of funding than others.

SUB-THEME 2 : "UNIVERSITIES AND ENTREPRENEURSHIP"

Professor F.O. KWAMI started the presentation of his paper by making the observation that if Mr Bartel's paper aimed at "achieving a state of readiness for diversified funding" then his paper was a logical follow-up which described concrete entrepreneurial activities taken by the University of Science and Technology in Kumasi, Ghana, to generate funds. He said the cases of failures and successes described in the paper were meant to give participants the opportunity to share his University's experiences with those wishing to undertake such entrepreneurial activities.

Professor KWAMI went on to endorse the point made by Mr Armerding in his introductory paper to give a broader dimension to the interpretation of entrepreneurship within the University setting to also include the development of an entrepreneurial culture to work and manage enterprises innovatively and the cultivation of a corporate culture within which initiative, leadership skills, independent thinking and meaningful management can be taught and learnt.

Professor KWAMI then went on to make the following points:

1. In the face of public expectations of what the Universities can do to contribute effectively to national development and government's criticisms of the current performance of the universities to which relatively huge public resources are being allocated, it was ethical and necessary for the universities to appraise and redefine their mission in order to carry out those activities which were more responsive and relevant to national needs. In this regard, the universities should adopt more effective management practices and be more cost-effective to reduce wastage.

2. Because of the dwindling resources allocated by government to the universities due to the weak economy and to the several pressures on government from all sectors of the economy for development funds, the universities were compelled to look for other sources of funds in order to carry out their academic work satisfactorily, fulfil national aspirations and make more visible impact on national development.
3. The additional resources needed by the universities need not necessarily be in cash, but could be in kind in the form of additional laboratory/workshop facilities, equipment for R & D work, provision of infrastructural/municipal facilities etc. In sum, the additional resources should enable the universities to carry out their academic activities in teaching, research and service to society better, to maintain, improve and augment campus infrastructural facilities and contribute to giving staff more job satisfaction.
4. Because of the various forms in which the additional resources could take, it was necessary for the universities to state clearly the objectives of university entrepreneurship. These objectives should form the framework within which entrepreneurial activities should be carried out without compromising the mission of the universities so that they stay within their areas of competence. A number of these objectives are listed in his paper.
5. The experience made in Kumasi from engaging in entrepreneurial activities by establishing business ventures to generate income showed that the University was not successful in making profit. This was due to the slow decision-making machinery of the university administration and to the diffuse corporate entity of the University which did not promote commitment on the part of the management and workers of the businesses and which did not make the business community including the banking institutions take the University seriously as a business partner.
6. The chances of success of business ventures where university dons were made managers were not bright because the university don was not necessarily a good business manager.
7. The assets of a university lie in its intellectual prowess. A judicious use of those assets in partnership with the private sector might be an effective way of participating in business to bring in direct financial resources, equipment for industry-sponsored R & D activity and incentives for staff. Therefore, avenues for such partnerships should be explored and exploited. He referred to the impressive efforts made by certain Brazilian universities to bring in considerable resources through

their partnerships with the private sector with their R & D activities.

8. Since industrialisation in Africa is in its infancy, the universities should undertake entrepreneurial activities to promote the growth of the private sector of industries, particularly the small-scale sector. The universities would benefit considerably from a flourishing private sector which they had helped to thrive.
9. Since the manufacturing base of African industry is not strong, it was not always easy to find a private enterprise which was ready to commercialise the results of R & D work of the academic departments. It was, therefore, necessary to encourage the academic departments to run production units to produce products they had developed to generate income. However, efforts should be made to make such production units more cost-effective and staff working in such units should be given the necessary incentives to motivate them.

Professor KWAMI concluded his presentation by disclosing that in Kumasi, departments which ran production units were allowed to keep all the income they generate for their exclusive use of augment their departmental facilities. He said considerable income was being generated through this arrangement.

After the presentation, there were lively interventions. The discussions and contributions welcomed Professor KWAMI's paper as a practical complement to the theoretical expositions contained in the paper on the first sub-theme on "Privatisation". The descriptions of the experiences gained by the University of Science and Technology in Kumasi in its entrepreneurial activities to seek alternative sources of funds were considered very educative and enriching and the University was commended for its efforts. The contributions showed that universities in Africa are carrying out diverse entrepreneurial activities to generate income with varying degrees of success. One university claimed to have generated almost 25% of its recurrent expenses through its various entrepreneurial activities. Surveys made by the Association of African Universities showed that serious efforts were being made by universities in Africa to find alternative sources. Based on the surveys, the Association had organized round-table conferences, seminars and workshops for Executive Heads of African Universities to assist them in their efforts, particularly to improve on the cost-effectiveness, efficiency and management in their fund-raising activities.

It was generally agreed that universities should concentrate their entrepreneurial activities in areas within their mission and competence and that efforts must be made to explore and exploit all the opportunities offered by the private sector for extra-budgetary funds. This, it was pointed out, might not always be easy since the private sector was not always co-operative in such matters. It was necessary to devise strategies for approaching the private sector, either through periodic meetings

or through the conclusion of formal agreements of collaboration to be able to win contracts or to receive costly equipment and other benefits in cash or kind.

It was also agreed that the slow-moving administrative machinery of the universities was a serious constraint on the universities' ability to engage in competitive business. It was argued that should the university wish to enter into business, then the rules of the university should be changed to enable the university to take quick business decisions. Other points of view were that the university could engage good managers to conduct business for the university while the university concentrated its efforts on academic work. However, in the light of the issue raised in the paper about Kumasi's experience, it was agreed that the university should adopt a cautious approach to undertaking business ventures outside its mission and competence. Failures, such as those described in the paper, were also confirmed by some universities. It was agreed that the universities should rather endeavour to sell assets, namely, knowledge, expertise and its R & D capability to the private sector of industries.

This generated considerable discussion on consultancy as an important avenue for generating income. Some universities have set up special structures for coordinating consultancy. However, many participants lamented about the inability of the university to control consultancy effectively to obtain a fair share of the consultant fees. It was agreed that there was the need to share ideas on how consultancy was regulated in the various universities so that each university could put in place effective guidelines to regulate consultancy to the satisfaction of the consultants on one hand and the university on the other. Furthermore, favorable conditions must be created for academic staff to engage in consultancy.

Other issues mentioned in the discussions concerned

1. - Charging realistic fees as a means of meeting academic costs. This was considered a rather delicate political and social matter.
2. - Creating conducive atmosphere in the universities to stem the brain drain. This was considered as an important objective to pursue.
3. - Imparting entrepreneurial and managerial skills to students so that the students upon graduation would like to go into the private sector. Some universities, it was noted, were doing this. In Kumasi, final year students were given courses on how to start and run their own businesses.

One trend in thinking which permeated the discussions of and contributions to the paper was the need for the adoption of cost-effective and good management strategies in the search for alternative sources of funding. This necessitates looking at entrepreneurship within the university setting as the cultivation

of a definite corporate culture which promotes the application of innovative management practices and entrepreneurial skills and puts the entire institution into a state of preparedness for and anticipation of income-generating opportunities and how best these can be exploited on a more sustainable basis. In all these endeavours, the quality of the graduates produced by the University should not be lost sight of. In this respect, it was found gratifying that efforts were being made by some universities in treating entrepreneurship as a discipline and preparing graduates accordingly for the private sector.

SUB-THEME 3 : THE POLICIES OF INTERNATIONAL FINANCIAL INSTITUTIONS TOWARDS AFRICAN UNIVERSITIES

In his remarks introducing his paper, Professor Hendaoui emphasized the concept of privatisation and warned against an analysis that neglected the diverse conditions of African universities. He thought that a distinction should be made between privatization on the one hand and cost-recovery measures, the sub-contracting of services to the private sector and income-generating activities of government-funded public universities on the other. Privatisation of higher education should be organized to encourage the private sector to finance the setting-up of post-university education institutions to support the State in its efforts to promote higher education.

Though African universities may differ as far as their social, cultural, geographic, political and economic conditions are concerned, they are facing, in varying degrees, the same problems of considerable budgetary difficulties, a constant growth in numbers, lack of internal and external efficiency, inadequate resource management and lack of capacity to generate their own resources.

Hence, there is a need for the requisite measures and the necessary structural reforms face up to these problems and to guarantee not only the viability of higher education but also the improvement of its quality and relevance.

The approach of the World Bank to issues pertaining to higher education in Africa and the rationalization of measures recommended deserve close attention. This approach is based on the theory of "human capital" where higher education is viewed as an investment and, as such, is characterized by a rate of social return as well as a rate of private or individual return.

This outlook which is both rich and relevant should be viewed with a great deal of caution as it implies an orientation of reforms for higher education. An under-estimate of the rate of social return from higher education, arising from difficulties in the correct assessment of the advantages of such education, could benefit primary education and marginalise universities. It could also lead to an exaggeration of the authorities' scope of manoeuvre to shift a part of the State's financial responsibility to users.

The measures recommended by the World Bank could be grouped into two categories: measures designed to diminish the heavy reliance on public resources and measures allowing for an efficient management of available resources.

The first category of measures basically refers to the public cost-recovery of higher education and the generation of the universities' own resources.

The improvement of public cost-recovery of post-secondary education proceeds from the principle of user-payer. It concerns a re-assessment of enrolment fees and a revision of the system of granting subsidies to students.

The problem in question is to know the extent to which enrolment fees can be raised and subsidies diminished, without harm to the underprivileged and, at the same time, to minimize difficulties of a political nature.

An increase in enrolment fees should be gradual and complemented by a system of exemption for small-income students. As regards reducing subsidies, the number of beneficiaries rather than the sum total of the grant should be taken into account.

The system of student loans which is aimed at mitigating the consequences of reducing subsidies and increasing enrolment fees does not seem to be the solution at least in the near future. In fact, the experience of some forty countries show how fragile this system is, where the failure to repay ultimately limits the number of beneficiaries. Therefore, if we do not wish to reject this approach, then there is a need to think of other systems of contribution based either on taxation or the inter-generating solidarity of graduates.

As regards the generation of income and the diversification of the universities' own resources, it should be pointed out that the promotion of research, consultancies and training services is essentially for the overall development of African countries.

However, such promotion requires the existence of a potential demand in the economic sectors, appropriate logistics and efficient marketing management and marketing services. It will not be easy to find these conditions in the near future particularly as most African economies are facing crises and owing to the fact that the informal economy constitutes a large part of national production. Furthermore, the statutory structure is in most cases an obstacle to the development of consultancies and training activities.

The second category of measures concerns the rationalization of the management of Universities and the establishment of efficient mechanisms for the allocation of resources. The proposals of the World Bank on improving the system of data collecting, developing the evaluation of academic activities and strategic planning are very interesting. However, they should

be included in a framework of global reform for the financing and management of universities.

Concluding, Professor Hendaoui, while acknowledging the relevance of the measures recommended by the World Bank emphasized the following :

- a) the need to consider the promotion of higher education as a national priority within the framework of new strategies for a lasting development based on the promotion of competition, indigenous capacities for technological innovation and a careful management of the environment, and
- b) the need to initiate contract-programme linking the State with the African universities where reforms requiring adequate funds are planned. These contract-programmes set up over a period of 5 to 7 years might comprise the following fields :
 - i) financial (the modalities of cost-recovery, the objectives of the diversification and generating of particular resources and criteria for the allocation of public resources) ;
 - ii) administrative (recycling of administrative staff, informal management, cost-evaluation, etc) ;
 - iii) statutory (reforms regarding the modalities of controlling expenditure, a greater autonomy in management, etc) ; and
 - iv) academic and scientific (educational reforms, modalities to control knowledge, evaluation of academic activities, revision of specialized courses, support of didactic means, etc) ;

These contract-programmes will require financing that cannot be realized except with the assistance of international financial institutions.

The interventions by participants after the introduction of the paper were on the issues of privatisation, modalities of public cost-recovery and reform of the framework of regulations.

Most of the participants supported the idea of contract-programmes and strongly reaffirmed the necessity of considering the promotion of higher education as a priority in development strategies. However, it was recognised that there is a minimum who cannot take part in the negotiations in the framework of contract-programmes.

Regarding privatisation, it was emphasized that private higher education institutions should not rely on State subsidies

to balance their budgets. Besides public-financed higher education would, for a long time, remain the main component of post-secondary education.

Concerning public cost-recovery in higher education, the difficulties arising from the fragile social and political structures of many African countries were pointed out. The scope for manoeuvreing seemed to be small and only in the short-term. However, certain participants believed that the principle of user-payer should be upheld although with a great deal of precaution. From this point of view, the loan system may be interesting at first but it brings in its train certain problems that are difficult to solve, for example, unemployment. Other participants believed that taxation could have an adverse effect such as tax evasion or the brain drain.

As regards the statutory structure in force, the participants unanimously denounced its rigid character and called for reform by granting more autonomy to the universities regarding the internal allocation of resources. They also believed that the development of their own resources through consultancy services and continuous research and training requires an adequate statutory structure, and a restructuring of university activities. The achievement of these reforms requires time and significant funds.

SUB-THEME 4: REGIONALIZATION AND THE ESTABLISHMENT OF NETWORKS AMONG AFRICAN UNIVERSITIES

Professor Seddoh expanded on the following major aspects of this subject.

(a) The relevance of regionalization.

- (i) In deciding to create national universities, African States were convinced that they would help to develop efficient training and research structures capable of bringing about positive transformations in the parlous circumstances of the African continent.
- (ii) In a world profoundly influenced by the tremendous rate of advancement of science and technology, in which higher education and research are tending to become structured in large-scale regional units, can African universities, faced with their acute problems of development, remain confined in water-tight compartments, out of contact with one another, each of them organized to pursue its goal of excellence independently?
- (iii) Given that most first-generation African universities have established their credentials by taking advantage of their federal-scale organization, has not the time come for

African universities to be restructured to form new units which, through regionalized courses and inter-institutional networks, will give rise to veritable centres of excellence able to meet the demands of the world university community?

(b) Past examples of regionalization in Africa

- (i) Subsequent to the regional groupings of the colonial era, African countries attempted to prevent the fragmentation of the continent by combining to form large sub-regional entities.
- (ii) The motives for this were either political, based on objectives of economic co-operation, or they stemmed from the desire of the countries concerned to pool their means of enhancing the value of their natural resources.
- (iii) These various groupings, aimed at strengthening economic integration at the continental level, raised great hopes among political leaders and among the populations concerned.

But the benefits which countries derived from them have not in all cases been proportionate to the financial efforts deployed.

- (iv) Furthermore, numerous African countries belong to very many organizations to which they find it difficult to meet their financial commitments.
- (v) Intergovernmental groupings will become profitable and prestige-enhancing only if there is a thoroughgoing restructuring based on maximum cost-effectiveness. This must mean fewer institutions, soundly managed so as to ensure proper co-ordination and the avoidance of overlapping.

(c) African universities today

- (i) Despite the undeniably positive role they have played in strengthening the human potential of both the public and private sectors, African universities today are faced with very serious difficulties:

The rate of increase in the number of students is too high.

The financial resources provided by the State are steadily declining.

Teaching staff are inadequate due to the brake on the recruitment of teachers and auxiliaries.

The internal efficiency and external yield of universities have declined over the years as a result of inadequate teaching materials and the insufficient diversification of courses, limiting students' choice.

The results of research have a weak impact on the development problems facing the university environment.

Access to modern technologies of information, analysis and distance education is difficult.

Co-operation is established preferentially with universities of the North, which possess greater human and material resources. South-South co-operation is on a small scale.

In most cases, the overall efficiency of the universities is sufficient to provide an acceptable standard of training at the first and second stages (undergraduate courses and studies leading to a Master's degree).

(ii) The same cannot be said of higher levels: the third stage (Doctorate studies) and specialized courses leading to limited employment opportunities. In this case, the regionalization and networking of universities are seen as essential for the maintenance of an acceptable standard.

(d) The regionalization of African universities and the development of centres of excellence

(i) African universities such as Dakar, Brazzaville, Abidjan, the University of East Africa, and the Makerere University in Uganda, began with a federal organization.

(ii) Not long after their creation, national universities realized that their capacities for the development of post-graduate and doctorate studies were limited.

(iii) Several examples may be cited:

The Special Programme for Agricultural Research (SPAAR).

The schools of the Organisation Commune Africaine et Malgache (OCAM), covering various fields, including water engineering and rural development, architecture and town planning, veterinary science and medicine, and informatics.

These latter schools, which are among the earliest experiments in regionalization in the field of higher education in French-speaking Africa, are encountering increasing difficulties resulting from the non-payment of contributions by the States concerned.

(e) Seeking favourable conditions for the creation of regional courses

The following criteria should, we consider, be met in defining a policy for the creation of regional courses:

- (i) The extent to which the course can contribute to development.
- (ii) The relevance of the courses to the labour market.
- (iii) Available resources.
- (iv) An appropriate regional balance.
- (v) Regulations facilitating the intake of teachers and students.
- (vi) The provision of the best training at lowest cost.
- (vii) Strict criteria for the admission and evaluation of students.
- (viii) The provision of access to new technologies.

(f) The principal types of regional course organization and forms of participation

- (i) Two main types can be organized: courses of regional scope, and shared training courses.
- (ii) Participation should be on a contractual basis, in one of two forms: a contract based on student enrolment, or a partnership contract covering training and research as a whole.

(g) Funding

- (i) Courses may be funded by the contracting States with the help of bilateral and multilateral aid.
- (ii) Courses may generate their own resources, and also receive donations.

(h) Management

Arrangements could be made to set up Scientific Councils to monitor the academic aspect of the training provided, and Boards of Directors to deal with administrative and funding matters.

(i) Description of some relevant projects

Several examples may be cited to illustrate the foregoing points:

The DEA (Diplôme d'Etude Approfondie) in Engineering.

The LATA course (languages applied to tourism and business).

Graduate Education in Economics for Africa (AERC).

Graduate Education in Economics for Africans (PTCI).

(j) University networks: a major asset for African universities

(i) Inter-university networks constitute the core of any policy of regionalization and multi-institutional courses.

(ii) Several forms of exchanges may be envisaged:

The constitution of networks of university teams, modelled on UREF (Université des Réseaux d'Expression Française).

Networks for the evaluation of curricula and the recognition of courses of study and diplomas.

Networks of documentation specialists.

All these networks could benefit from the UNITWIN programme and UNESCO Chairs.

DISCUSSION ON THE SUBJECT OF REGIONALIZATION

The sub-theme of Regionalization gave rise to a lively discussion, from which the following major ideas emerged.

(a) Regionalization was seen as a necessity for African universities, some of which originally had a federal structure. This underlined the relevance of Professor Seddoh's proposals.

(b) However, in countries which have several universities, it is preferable for inter-institutional solidarity and the pooling of resources to begin at the national level. In this respect Conferences of Rectors and Vice-Chancellors have an important role to play.

(c) Several Rectors and Vice-Chancellors pointed out that their universities incorporated training and research units that could serve as centres of excellence in various fields. These national structures were prepared to adopt a regional approach and admit students from other African countries. Before deciding to create

new training and research units, it would be preferable to examine the possibility of taking advantage of existing structures of proven efficiency.

(d) Previous attempts to pool training units and courses have shown that problems, mostly of a political nature, can sometimes be encountered. Efforts must be made to smooth out these difficulties in order to ensure the success of regional courses.

(e) Emphasis was laid on the close relationships between regionalization and the mobility of students and teachers. Efforts should therefore be pursued to harmonize curricula, establish equivalences between diplomas, and homogenize the criteria of evaluation of university teaching staff.

In this respect, organizations such as CAMES can play a determining role where universities in French-speaking Sub-Saharan Africa are concerned.

(f) The need was also pointed out for a degree of standardization of university management functions such as accounting. This would make the data supplied by various universities more reliable, and would facilitate comparisons.

(g) Several participants raised the question of what factors have contributed to impeding the pooling of African universities' resources at the regional level. In most cases, this could be attributed to difficulties of a political nature outside the control of the universities themselves. A determination on the part of the universities themselves to favour regionalization could help to surmount these difficulties, mainly those of a psychological nature.

(h) It was suggested that African States should try to create working conditions in regional structures better than those encountered in most national universities.

(i) While confirming the need for more cost-effective training, the participants pointed out the risks incurred in making regional courses entirely dependent on external funding. The premature withdrawal of such financial support could mean the pure and simple extinction of these regional structures, whatever their utility for the States concerned.

Efforts to regionalize higher education must therefore be backed by the political resolve of those States.

(j) It was considered on the whole that access to modern technologies of information and distance education (the subject of the reference document) is one of the surest ways (especially where traditional systems have proved ineffective) of coping with the shortage of highly qualified teachers in new subject areas, the rapid growth in the number of students, and the inadequacy of documentary material, as well as ensuring the provision of distance education (extra muros).

(k) Though new technologies can help to enhance markedly the quality and relevance of university education and research, they must be introduced with an eye to the real needs that have to be met, and appropriate instructional material must be prepared by high-level pluridisciplinary teams in the context of South-South as well as North-South co-operation.

(l) Renewed support was expressed for the pursuance of a policy of creating multimedia relay centres throughout the African continent, such as the SYFED points in Dakar and Alexandria, and of attempting to extend their coverage to areas other than French-speaking countries.

(m) It was agreed that regional courses and inter-institution networking were inconceivable without a mastery of recent advances in information and communication technologies.

Moreover, it is in the regional framework that the introduction of these new technologies can be made most cost-effective.

These last three points (k, l and m) concerning new information and communication technologies were discussed in greater depth (see Annex III).

In conclusion, the participants referred to the various possibilities of back-up which should be made available to African universities and concerning which the three seminars held in Accra, Dakar and Lomé had provided information: the SYFED points established by AUPELF, UREF and the REDOSI base; UNESCO Chairs and the UNITWIN system; UNESCO's International Programme for the Development of Communication (IPDC); the extension of the TV5/Africa programmes; and the Commonwealth of Learning. The participants also expressed their wish that the two instruments of information exchange which it had been decided to prepare at the Arusha seminar be made available soon: the compendium, and the data-base of distance education institutions, programmes and systems in Africa.

It was agreed that pilot projects which could benefit from the support of existing co-operation programmes be prepared.

Generally speaking, where practical ways and means of co-operating in the field of new information and communication technologies (NTIC) are concerned, a distinction should always be made between:

(a) Projects aimed at using NTIC to establish or strengthen co-operation networks, exchange data, etc.

(b) Projects designed to use NTIC for distance education (e.g. "Open Universities").

**THE ALEXANDRIA STATEMENT
ON THE RESOURCES AND
MANAGEMENT OF AFRICAN UNIVERSITIES**

1. The Alexandria seminar on "Resources and Management of African Universities" was organized by UNESCO, within its Priority Africa Programme, from 26 to 30 April 1993, with the collaboration of the Association of African Universities (AAU) and the University of Alexandria. It is the third and last in the series of seminars on Higher Education in Africa designed to bring together African Vice-Chancellors, Rectors and top-level managers to discuss ways and means of tackling the problems of African universities, particularly with regard to improving planning, governance and management of Higher Education in Africa.

The subject of the seminar was examined under the four sub-themes with the guidance of the following documents:

- (a) Achieving a state of readiness for diversified funding: "Privatisation".
- (b) Universities and entrepreneurship.
- (c) Policies of financial institutions towards African Universities.
- (d) Regionalization and networking among African Universities.

UNESCO draft orientation papers on the development of higher education, the UNITWIN/UNESCO chairs projects as well as new information and communication technologies (NTIC) were also considered by the seminar.

**ACHIEVING A STATE OF READINESS FOR DIVERSIFICATION OF FUNDING:
"PRIVATISATION"**

2. The seminar recalled the Dakar 1992 statement on diversification of sources of funding and indicated the steps that were available, on-going, and were being initiated. Examples provided by those African Universities, which were further along the pathways of generating income from non-governmental sources, were welcomed. It was reaffirmed that the results of seeking for, and attracting funds from the non-governmental sector were required not just for 'cosmetic' purposes but to augment not only the teaching and research capacity of the African University for the benefit of its primary beneficiary, the student, but also to impart appropriate skills into management effectiveness and cost-efficiency.

3. The management of the African universities would need to adopt a strategy to assist in the process of providing an emerging legislative environment in Africa not only for the acceptance of increasing private sector contributions into existing Universities but also for the creation of wholly privately funded new universities.

4. The strategies which were currently at work linking African Universities to private economic operators: establishing partnership; exploiting their science and technology capacity and capability, were commended. The production of a series of guideline case studies to be published and disseminated is recommended.

5. The methodologies which were presently being used within African Universities to improve their internal efficiencies with regard to non-academic operations (security, transportation etc.,) were highlighted. The collation of such methodologies for publication and distribution as an immediate response to the financial constraints is also recommended.

6. The enhancement, through learning advanced managerial skills and operational techniques for improving the managing of the administrative process and organizational performance, of African universities should be pursued.

UNIVERSITIES AND ENTREPRENEURSHIP

7. Universities should define, for their guidance, clear objectives for entrepreneurial activities. Such objectives should include developing a culture of entrepreneurship to work and manage enterprises and cultivate a corporate culture within which initiative, leadership skills, independent thinking and meaningful management can be taught and learnt.

8. In the face of dwindling resources allocation to the universities by their governments, universities should engage in entrepreneurial activities to generate additional funds without compromising their mission. In so doing, the managerial efficiency and the decision-making ability of the universities must be improved.

9. Efforts should be made to improve upon the efficiency, cost-effectiveness and management of the entrepreneurial activities.

10. Universities should use their assets (knowledge, expertise and R & D capability) more effectively to generate income through consultancy and other services which should be properly costed.

11. Consultancy should be promoted, encouraged and regulated. A fair, satisfactory apportionment of fees between the university and the consultant should be worked out.

12. Opportunities in the private sector for income generation should be explored and exploited.

13. In seeking alternative sources of funds, universities should also carry out entrepreneurial activities which promote the growth of the private sector, particularly the small-scale sector of industries. It is noted that some universities are already doing this successfully.

**POLICIES OF INTERNATIONAL FINANCIAL INSTITUTIONS
TOWARDS AFRICAN UNIVERSITIES**

14. The approach to issues relating to higher education in Africa, and measures arising from it, with particular reference to financial and management of resources, was subjected to critical examination by Vice-Chancellors and Rectors. While noting the relevance of the measures suggested by these institutions, the Vice-Chancellors and Rectors would like to draw particular attention to the following points.

15. The privatisation of higher education should be seen as encouraging the private sector to establish and finance its own institutions as a contribution to the efforts of governments to promote higher education.

16. Measures designed to recover public sector costs on higher education should take due account of the social and economic environment of specific African Universities.

17. In most African countries the margin of manoeuvre allowed the public sector for transferring the cost of higher education to its beneficiaries is quite narrow. While agreeing with the principle of "User-Payer," it was felt that this should be applied gradually and with soundness of judgement.

18. The development of consultancy services, contracting out research projects, mounting continuing education courses are important for the development of African countries. This however requires the collaboration of the private sector, as well as the creation of an appropriate structure for promoting and managing such services.

19. In a large number of cases the act establishing University will need to be reviewed in order to allow for greater flexibility in the disbursement of internally-generated resources.

20. The development of higher education should become a national priority, a sine qua non for sustainable development.

21. Programme-related contracts between the State and Universities is an important means (at least in the medium-term) of restructuring universities and of the viability of the national system of higher education.

22. Such programme-related contracts should indicate the lines of reforms to be undertaken, the objectives to be attained (in terms of financial administrative and pedagogic guidelines), as well as the resources mobilized by the state to make the reform possible.

REGIONALIZATION AND NETWORKING AMONG AFRICAN COUNTRIES

23. In a world deeply marked by the rapid developments of science and technology, in which higher education, knowledge, and research are becoming international in scope and are tending to cohere in large international groups, African Universities faced with their acute financial and developmental problems, cannot remain confined in sealed off compartments out of contact with one another, each of them organized to pursue its own ends independently.

24. It is, therefore, imperative that regionalization and inter-university co-operation among African Universities become an important element in the quest for pooling and sharing of resources, for the rapid transfer and exchange of knowledge and technology, for the proper and broader exchange of information and experience and also for the use and development of new technologies relevant to differing socio-economic African contexts.

25. While the pooling of resources available for higher education on the national level must be considered as the basis for the success of regional efforts, the political will is equally important for the realization of sound regional cooperative projects and programmes.

26. Regionalization and regional networking should not, however, be seen as an endeavour which can operate without that broader support which can be drawn from the existing greater pool of international co-operation in higher education. It is therefore important to take into consideration, in developing new regional networks and reinforce existing ones, to make sure that they include those international outreach arrangements which would guarantee their broader international perspective.

27. Having considered the objectives and the operational experience gained from the implementation of the two UNESCO initiatives, UNITWIN and UNESCO Chairs, it is highly recommended that all African Universities, and the regional networks which already exist, should explore all possibilities to invest these two initiatives in their future quest to establish new networks and reinforce existing ones. Most important in this domain is the identification, formulation and development of regional institutions and centres of excellence which benefit all African Universities. The idea of developing a Pan-African Satellite University of Science and Technology should be explored for implementation within the framework of UNITWIN programme.

CONCLUSION

28. In concluding, the participants expressed their deep appreciation to Mr Federico Mayor, Director-General of UNESCO, for initiating the Priority Africa Programme and for paying particular attention to the problems of African Universities.

29. They expressed the wish that the Director-General ensure a wide dissemination of the results of this series of seminars and also to consider convening a meeting of African ministers responsible for higher education and major funding agencies to discuss practical steps for improving the situation diagnosed in the course of the seminars.

30. Finally, the Vice-Chancellors and Rectors of African Universities thanked the government and people of the Arab Republic of Egypt and in particular the authorities of the University of Alexandria for their hospitality and for the excellent arrangements made for the seminar.

Address by Mr. Eric ARMERDING
Representative of the Director-General of UNESCO

Mr. Chairman,
The Vice-President of the University of Alexandria,
Vice-Chancellors and Rectors of African Universities,
The Secretary-General of the AAU,
Distinguished Guests,
Ladies and Gentlemen,

Three years ago, the Director-General of UNESCO, Mr. Federico Mayor took the decisive step of providing a forum where Vice-Chancellors and Rectors of African Universities would examine and share experiences on the problems of University governance and management in Africa. This forum consists of a series of three seminars, the first one of which took place in Accra at the University of Legon in November 1991.

Mr. Mayor was able to be present and to speak to that first seminar. His words on that occasion will long be remembered for the quality of thought and the depth of their inspiration. His answer to the question: what is University for, set the tone and provided the intellectual guidance for the deliberations of the seminar.

He wished he could have been here at this, the third of the series, to share his thoughts once again with you as he emphasized at Accra in a spirit of learning. Unfortunately the exigencies of the service have not permitted him to be with you today. And he has asked me to pass on to you his warm greetings and best wishes for a successful seminar, in the firm belief that the conclusions you will be arriving at will be a basis for further thought-stimulating and an action-oriented co-operation between yourselves and the international community.

Indeed, distinguished Vice-Chancellors and Rectors, you are an important section of the international community. UNESCO cannot perform, let alone, accomplish its tasks and its mandate without your help in providing, together with the leadership of the Universities of the world, the intellectual and moral solidarity on which peace must be founded, if it is not to fail, and by which development must be guided, if it is to succeed, be positive and fruitful.

Mr. Mayor has also asked me to thank most sincerely the Government of Egypt, its Ministry of education and the Vice-President of the University of Alexandria for agreeing to host this seminar. Their kindness and generosity have enabled us to put into practice the model which Professor Ajayi presented to

the Accra workshop of the Association of Africa Universities in July 1972 when he was opening the discussion on the problem of indigenizing our African Universities. This, he said, involved a whole question of identity and continuity with African traditions. He said, and I quote: "Like the modern academic, the traditional village elder, diviner or moslem scholar remained a little apart from the people. In their time, knowledge and the intellectual life required a certain withdrawal. It conferred respect and even fear. However, there was understanding behind the respect and the fear, for the knowledge and the intellectual life provided answers to the vital problems of the common man in a language and a form he could comprehend. Both the awesome diviner and his impressed client were part of the same culture, sharing the same identity. The withdrawal of the diviner was not a withdrawal from the daily life and problems of his client; but a privilege and an opportunity to enable him to seek more effective answers to the day-to-day problems of the people."

The Government of Egypt and our host University have provided us with the privilege and the opportunity to withdraw for a while from the strife, economic difficulties, environmental depredation and, even our students, into the relative quiet of this prestigious University of Alexandria. Our task here is to find the kind of answers which will be meaningful to our people when we go back to the work of our daily existence. The recess required, the company and above all, the intellectual brainstorming to which we are looking forward should, I hope and pray, make us better able to sharpen our ideas about the mission of our Universities, the structural reform we should engage in and the entrepreneurial management we should apply.

We recognize the privilege and the opportunity with thanks and ask the Representative of the Minister of Education to pass our thanks on to the Government and the Vice-President of this University to do the same with respect to his Council and academic staff.

We do not forget participants and observers from the United Nations System and other bodies who have joined us in this retreat. We welcome in particular the Representatives of the African Development Bank, the OAU and UNDP. They have behind them not only the financial wherewithal which can give support to our own effort in carrying out our mission, reforming our structural arrangements and applying new management and entrepreneurial system in the course of our mission. They also have a rapidly expanding researched intellectual experience upon which our effort can draw. We welcome their participation and earnestly hope that our time together here will strengthen the links of co-operation which we have been forging over the past thirty years since the Tananarive Conference on Higher Education in 1962.

Nor should we be oblivious of the people of Egypt, those who will, in one way or another help us this week by their service, their courtesy, and, above all, by the inspiration they will assist us to draw from their entire land and its contribution to

the World Heritage. We thank them in advance for the privilege of being among them even if, in the course of our assignment, we seem to withdraw from time to time.

I am reminded, in this connection, of the Egyptian story which, I am sure, is very well known, but which I crave your indulgence to repeat because of its enduring lesson for us long after we have come to the end of our Seminar. A Prince of the House of Pharaoh often gazed with covetous eyes on the great pyramid of Giza. Little did he understand the meaning of that fabric. In his youthful ambition he had a vision of his future reign as one of magnificence that would not be lost to the world. So he called in the master architect and commanded him to build for him a lasting monument. The master builder bowed his head in obeisance and said: "A material monument I can build; but in time it might be levelled. Only you can do the impossible thing you demand. Build your monument in the hearts of men. Your name may be lost in time, but the effects of your sound work like the ripple on the shoreless sea will go on forever."

In whichever way we put it, we are here to engage in sound work, hopefully to be better able, on our return home, to serve our students and through them our nation.

It is the hope of the Director-General of UNESCO that the outcome of our work of three seminars, the last of which we begin today, will be of lasting value and include a set of proposals which can be presented to a Conference of Ministers of government responsible for higher education. That hope is founded on the unambiguous expression of interest by the Organization of African Unity whose Heads of State and Government adopted unanimously at the Dakar Summit in July 1992 a resolution commending what we are doing in our forum and appealing to the Director-General of UNESCO to associate the Secretary-General of OAU with any initiative that may be taken to reinforce the Universities and institutions of higher education in Africa.

Mr Chairman, Vice-President of the University of Alexandria, Distinguished Vice-Chancellors and Rectors of African Universities, your recommendations at the conclusion of the three seminars this week should constitute the basis for the kind of initiative with which the Director-General of UNESCO can associate not only yourselves but also the Organization of African Unity.

I wish you well.

PRESENTATION OF THE OBJECTIVES
AND PROGRAMME FOR THE SEMINAR
(By Mr E. ARMERDING)

INTRODUCTION

In the course of the past three years, we have tried to define, analyse and find solutions for issues which have faced, beset and hampered the progress of African universities during the last three decades. We have seen the issues in the context of agenda-setting conferences and specialist meetings organized either by UNESCO in collaboration with regional bodies or by the regional associations themselves such as the Association of the African Universities. We have also seen the issues in terms of features of development assistance in three development decades and beyond, of models of development in higher education in Africa and of various moods generated by different manifestations of crises. Further, we have examined them in relation to the need to enhance potential, improve process and upgrade performance and make it sustainable in order to ameliorate capacity and capability for improving performance on the one hand and of creating a coherent corporate culture on the other hand.

Moreover, we have studied, in some detail, what the Mission of the African University should be so that, while our universities share the functions of learning, teaching, research and service to the community with other universities in other parts of the world, they might be galvanized by such a clear-sighted mission, and a sense of it, into addressing more poignantly the region-specific problems of their special human and physical environment. More recently, at Dakar in November 1992, we looked into the kind of structures which would facilitate the execution of a University Mission and the performance of related functions. We considered appropriate policies and modalities of admission of students; structures of the entire system of post-secondary education; new technologies for, and co-operation in, tackling pluridisciplinary problems and increasing efficiency in the performance of mandated functions; and, finally, what serves as a useful introduction to our Seminar which begins today, the planning and allocation of resources.

THE MAIN THEME AND THREE CHALLENGES

Our discussion of that sub-theme, the planning and allocation of resources, as you will find on page 9 of the Dakar Seminar report, underlined one stark reality which should inform and suffuse our deliberations on the theme of our Alexandria Seminar: The Resources and Management of the African University. We concluded at Dakar and I quote:

"The financing of higher education was entirely being borne by Government. Consequently, as economic output declined, in almost all African countries, national capacities to finance university education dropped, and universities had been progressively forced to accept sizeable cuts in government financial provision. Universities must, therefore, make an effort with judicious management of available resources, to be cost-effective."

The cues for action and for how to act in this quotation, I suggest, are management and Cost-effectiveness. The discussion at Dakar did lead to conclusions on what should, and can, be done. Among what were proposed were:

- (a) the strengthening of the management of the resources made available (p.14(c));
- (b) securing management autonomy which is the best means of enabling the university to manage its resources efficiently (p.15(c));
- (c) diversification of sources of financing by using university expertise in the field of training, research and services on the one hand and the creation of funds for the setting up of centres of excellence on the other (p.15(e)); and
- (d) the establishment of high-quality private-sector-financed higher educational institutions.

Such proposals, like many of their kind as pointed out in paragraph 120 of the Bradford management Center paper on the first sub-theme of our Seminar, are long on what to do, who should do it, and where. They are regrettably short on how it should be done and, indeed, why it should be done from the competitive perspective in a fiercely competitive world. This Seminar presents us with the opportunity of taking the discussion of previous relevant recommendations further, asking questions and finding answers in terms of choices available. In the final analysis, each university will be finding its own answers; but we would have assisted the university in its search by indicating, in this our forum, the range of choices there can be and the options the university can examine and choose from.

To illustrate my point from a consideration of the two operative words of our Dakar conclusion and the specific recommendation to strengthen management. How does one set about strengthening management? Is it by increasing administrative staff, cutting it down, replacing some and training others? Or is it by educating a promising few to understand and apply new technology in assembling, organizing, keeping up-to-date, and interpreting, data to improve performance? Or is it by increasing university and campus self-knowledge, fostering genuine self-criticism and achieving the necessary self-correction at the centre and periphery, not excepting the Vice-Chancellor's office? Or is it by devising and establishing standardized procedures for

the analysis and distribution of relevant statistical data pertaining to central and departmental administration and for keeping such information up-to-date? Or is it by establishing cost-control mechanisms and resource entitlement criteria, methods of implementation and review and analysis of these? Or is it by re-structuring the university, as recommended by Robert Blair p.51, in such a way that each activity is operated as a cost centre? Or is it by recognizing the value of orderly operations and, therefore, the need, in act as well as in word, for university personnel to carry on their major contacts and business with Government through a designated office where people occupying the designated posts can be cultivated and developed so as to be knowledgeable about the university? Or is it by helping such people to become effective within Government in the analysis and presentation of issues particularly where university and Government may not have the same pathways to goals and aspirations? Or is it by looking and working for, and meriting, Government support of university management on grounds of the efficient and effective discharge of functions without losing sight of the prevailing political imperatives?

In connection with the last question - that of how best to secure government support in the form of a resource of intellectual and moral solidarity behind university management - we shall do well to remember the words of the second UNESCO Director-General, Torres Bodet. He was the founder of regional meetings; and he has been described as godfather at the christening of the International Association of Universities at Nice in France in 1950. I need hardly, in an audience of this kind, underline the debt owed by our universities, and the AAU to that single event. Mentioning the tasks ahead at that meeting, Torres Bodet said that he was not proposing that the separate domains of politics and the universities should in the smallest degree be merged or confused. On the contrary, he stated, and I quote:

"It is essential that the universities should hold aloof both from party strife and from the official ideologies; that they zealously guard their independence and serenity. But independence does not mean indifference nor serenity mental blindness. there is no reason whatever my impartial teaching, based on the strictest scientific objectivity, should give the impression of flying from reality and thus leave the young who are taught ill-equipped to cope with the world."

The first challenge to this Seminar, therefore, I suggest, is to keep in focus the student and graduate of the university. He is not only a user of the management choices we make. He is not only one of the beneficiaries of these choices as well as the levels of effectiveness and efficiency at which these choices are executed. He is also the product of the university. According to the Bradford Management Centre document paragraph 124, the product, the graduate, should be the embodiment of everything said in that paper. It is through his capacity and capability for solving problems that the community will support the African

University. No doubt, that paper, its presentation and the discussion which follows will help us assess the dimensions of the challenge.

The second challenge to the varied, extensive and researched experience represented in our Vice-Chancellors and Rectors of African universities is, I suggest, related not only to the frequently recommended ideal of cost-effectiveness, another example of what to do, who should be doing and where. It is related to how to be cost-effective; how to bring each institution to a state of readiness to be cost-effective; how to arrive at a definition of the referents and criteria by which cost-effectiveness, in relation to both quantity and quality, can be gauged; how to move towards Robert Blair's recommendation of an "awareness of what everything costs (page 7) how to move beyond to a cost-effective equation where such variables as unit/cost, staff/student ratio, contact hours etc. are arrived at, less and less on the basis of the expedient and more and more in the information-intense context of managerial effectiveness and efficiency. This is not to say that the variables in a cost-effective equation are not notoriously difficult to interpret and still more so when used for purposes of comparison with apparently similar figures obtained from elsewhere. A problem arises when universities are requested, or they themselves see the need, to mount new courses for development purposes. On such occasions, it may be impossible to be cost-effective. And this is where and how the university may take the lead, on the basis of information-intense communications systems and transparent management, in making everybody aware what everything costs. Which brings us to the third challenge.

The third challenge, I suggest, is to help us go away from this Seminar, clearer in our mind as to what we understand by management and the kind of management we wish to see in our universities by the fiftieth anniversary of UNESCO in 1996 and beyond to the year 2000. Without achieving that clarity of thought we would not be doing justice to the theme of the Seminar: The Resources and Management of the Africa University. You would recall that the UNESCO Reference Document made available to the Dakar Seminar pointed out in its introductory pages the tendency in history to subsume management under administration. The result of that subsumption has been to limit the extent to which efficient and effective management is regarded as essential at all levels and in all personnel of the entire educational system. I quote:

"By the same token, the Vice-chancellor or Rector, is a manager, in the first instance, charged with the task of managing the co-operative endeavour of innumerable managers at all levels, from the Pro-Vice-Chancellor to the President of the Students' Union and the Head of the grounds staff. He is more than, and embraces the functions of, the conductor of an orchestra, which 'demands the services of all and finds an instrument for each.' He manages a multi-million endeavour."

Professor Alex Kwapong was close to the truth when he described himself in the first Bulletin of the AAU not only as the Vice-chancellor of the University of Ghana. He also saw himself as the Lord Mayor of the township of Legon in charge of the municipal needs of the campus. He invited universities in Africa to review their municipal services and their costs; set them out clearly; differentiate them from academic services and costs; and manage them as efficiently as they can, while progressively shedding those municipal services as circumstances permit. The point I wish to emphasize, from this quotation is that academic services have also got to be managed efficiently and effectively, whether the burden of municipal services exists or not. And in this context, and according to the UNESCO Reference document, sound management or effective and efficient management, to borrow the words of modern successful industrialists is, doing the right things and doing those things right. The paper went on to say that an important key to the success of the entire enterprise of the African University will inevitably be: the application of innovative, entrepreneurial, effective and efficient management. Such management should be known to be a source of enrichment for creating a coherent corporate culture that earns the loyalty of a widening community within and outside the university.

One would not be so disingenuous as to say that there is only one key. The question must, therefore, be asked: what is the alternative? Indeed, what other options are there to be sought and found and applied at this point in time in the life of our continent in general and within the entire enterprise of the African University in particular? I commend these questions to you for examination in the hope that the relevant paragraphs from 46 onwards in the Bradford Management Center document, re-affirming the key to success mentioned above, will be of help.

FIRST SUB-THEME: PRIVATISATION

Indeed, these questions, the re-affirmation of the key to success, and the thoughts they evoke constitute the fourth challenge to this Seminar. They also bring us to the first sub-theme of our Seminar, Privatisation. The challenge may be framed as follows: how can the African University, to use the words of the Bradford Management Center document, paragraph 47, successfully address its own and the African condition and thereby enable - not only the human product of its work, the graduate, but the entire human resources it develops - students, graduates, alumni and staff (academic, administrative and supporting personnel) - to manage change, bringing to the service of its nations the asset of technology, the currency of information, the discipline of management, the reward of advantage and the drive of entrepreneurship? How the African University brings itself to a state of unquestionable readiness for the tasks involved and, specifically, for achieving diversified funding from sources including the private sector is the sub-theme the Bradford Management Center document should provide a basis for discussion.

The main thrust of the document should stimulate a lively debate. Whatever the difficulties, whatever the attenuating circumstances, whatever the sympathetic understanding the worsening economic situation of African countries calls for, the onus is on the African university itself to command respect from, and the confidence of, its external audience. It is only when that happens that individuals and groups in that audience will dip into their pockets and, then, only when they know what they can expect in return. What are the difficulties? What are the circumstances? What are reasonable grounds for sympathy? How does the African University get itself ready to approach the private sector? What business plans and management action can the African University unambiguously present? These are some of the questions the Seminar may wish to consider as it faces up to the challenge of privatisation.

SECOND SUB-THEME: ENTREPRENEURSHIP

Turning to the second sub-theme - ENTREPRENEURSHIP - when we ask similar questions, Professor Kwami's paper predicts, to quote his own words, "an outlook which may not necessarily be bright." His paragraph 13 talks about "units which operated at a loss." His paragraph 15 suggests that one enterprise of some promise did not secure the funding expected because "it is most probable that the business approach on the side of the university did not make much impact on the banking institutions to take the university as a serious entrepreneur capable of paying back any loans granted to it." The university is presented as a nebulous corporate entity which may not too easily come by the business-sense of purpose that contributes to a successful venture. Is that the case? Is it unavoidable? Is an internal structure which makes decision-making dilatory and is acknowledged to be resistant to change so vital in its current form, so vital to the life and work of the university that one has to have it for all time? Are such observations not tending to be a part of an existing cosmetic, or even a self-perpetuating myth, which has to be unravelled and microscopically examined in the face of the challenges of the times and the pressing need for change as well as the maintenance of cultural integrity in the midst of change?

Nevertheless, Professor Kwami provides illustrations of success stories of entrepreneurship as well as those of failure. In this sense, he gives us a practical complement to the Bartels/Weir theoretical basis for discussion. Its success stories have flowed out of university teaching, research and concern, in the course of normal university work such as that of the Department of Architecture and the development of low-cost housing, not to mention the Industrial Technology Transfer Unit and its extension services in some five centres which have been recently allocated the sum of \$ 3 million by the UNDP. It would seem that something on the lines of the main thrust of the Bartels/Weir paper is already happening. If it is, what is it? If it is not, why not?

The two documents of Bartels/Weir and Kwami lead us to the link there is between Management and Entrepreneurship. In searching for a suitable definition to guide our debate, I suggest that we bear in mind the following: If Management is doing the right things and doing those things right and on time, then entrepreneurship, in the university setting, is much more than just establishing enterprises and running them for profit to augment university funds. I suggest that entrepreneurship implies new applications of management, or the application of innovative management, to a carefully researched and mounted enterprise to give those in charge, or the entrepreneurs, an effective control over it to ensure that potential is increased, processes in use are enhanced in effectiveness, and performance improves, adds value and becomes sustainable, leading to the production of certain desired results.

I suggest that one of the objectives of entrepreneurship, in the university context, should be seen as pointing towards managerially-effective practice; efficiently-monitored acquisition of "useful" knowledge; the organization of that knowledge into a discipline, and the cultivation of the discipline into an integral part of culture. I would, therefore, suggest for inclusion in the objectives listed by Professor Kwami some such idea which may be debated and further refined by the Seminar: To work for and manage an enterprise or enterprises, first, as a practice, second, as a discipline and, thirdly, as a part of corporate culture within which initiative, leadership skills, independent thinking and meaningful management can be taught and learnt. I further suggest that clarifying our thinking on what entrepreneurship in the university should aim at as well as finding answers to questions I have raised in respect of the success stories in Professor Kwami's paper is the fifth challenge to this Seminar.

THIRD SUB-THEME: POLICIES OF FINANCIAL INSTITUTIONS
WITH REGARD TO AFRICAN UNIVERSITIES

For the discussion of this point - policies of financial institutions with regard to African universities - Professor Afif HENDAOUI's paper provides us with a basis. A number of questions present themselves. What have been the main directions of change in policy which have been followed by not only the World Bank but also other donor agencies during the past thirty years? What justifications for such change have been observed and what positive and concrete institutional, managerial and structural reforms have taken place in response? To what extent does the five-point orientation on which the World Bank bases its recommendations for funding, as set out in paragraph 9 of Professor A. HENDAOUI's paper, accord with not only the felt needs but also the real needs of the African university? What other considerations or possibilities should be taken into account? What are the social implications for African countries of financial policies of aid agencies and how can these be more fully brought into researched discussion? And, finally, should

not research by African universities themselves into questions of this kind try to overtake that of external agencies with a view to moving from the periphery into the centre of the debate on university funding? Should not the African universities try, by their own competence, to get donors into a frame of mind in which eagerness to help replaces institutional solicitation as, indeed, was the case in the 1960s. Are we asking for something which is impossible to achieve?

FOURTH SUB-THEME: REGIONALIZATION AND THE ESTABLISHMENT
OF NETWORKS AMONG AFRICAN UNIVERSITIES

The sixth challenge is to look, theoretically and in practice, at our third sub-theme - regionalization and the establishment of networks among African universities - as an enterprise to be run by those in charge, and those who manage it, as entrepreneurs, skilled and, if necessary, trained to apply innovative management, as is expected of profit-making ventures like McDonalds, Marks and Spencers, Sony, Volvo etc. Or is there an alternative to continually improving service; marketing that service in the basis of an intensive market research; cutting down fattened secretariats and putting a premium on productivity in staff-selection and retention; widespread realization that there ought to be a better way of doing things. If there is an alternative to all this, then it must be made known and examined.

Obviously both universities and their countries should cease drifting into regional arrangements without counting the cost. They cannot, however, escape from their historical past, which Professor Seddoh so vividly portrays in his document. Perceived needs compelled reaching across frontiers of imperial geographical boundaries, the cultural and language divide, and educational expressions of deep-seated psychological divisions in order to share and exchange experience for mutual benefit. In the process, quantity may have tended to exceed quality and cost may have out-paced benefit. The challenge to this Seminar is to provide the necessary guidelines, on the basis of innovative, effective, efficient and entrepreneurial management, for pruning, cultivating and nurturing this immense asset for university and national development.

Some guidelines have already emerged at Accra and Dakar and suggest the following questions: Has there been a break between the past and present, between the old and the new, to an extent which denies the name, African, to its universities? Has this, in fact, led to incapacity to contribute to the management of national educational systems and to the proliferation of institutions, and to insularity, at the expense of sub-regional and regional views of needs? (Albert NOUHOUAYI, Accra 1991) Is the thesis of a revision of frontiers and sub-regional and regional universities feasible? (Albert NOUHOUAYI, Accra 1991) There may be some other questions that the Seminar may pose as it develops its guidelines for converting the asset of regionalization into a firmly-established enterprise.

In this connection, the challenge to this Seminar, the seventh, is two-fold: first how to establish the most cost-effective new technologies, examples of which were discussed at Dakar, for managing the enterprise of regionalism and networking and, secondly, how to earn and create the necessary financial support and basis for managing successfully such an enterprise.

In the final analysis, the way forward must lie in innovative effective, efficient and entrepreneurial management which will compel outside bodies to recognize rejuvenation where it exists, and performance when it takes place, in discharging a mission which all partners in the enterprise of the university have accepted.

Vice-Chancellors and Rectors, I wish you well in your deliberations.

**Inter-university co-operation
and new information and communication technologies (NTIC)**

Discussion of this sub-theme was backed up by a visit to Senghor University, in the course of which all the participants made acquaintance with that institution and with the SYFED point in Alexandria.

In her introductory remarks, Madame Régine Thomas expanded on the following major ideas:

(a) During the explanatory addresses on the different sub-themes of the Alexandria Seminar, and in the course of the discussions which followed each of them, the need to have recourse to NTIC was frequently reiterated; this was proof, if proof were needed, that since the Accra and Dakar seminars African university Rectors, Vice-Chancellors and Administrators had become more keenly aware of the importance of these technologies and of the determining role they could play in Africa in improving higher education both quantitatively and qualitatively, in developing research capacities, and in promoting and stimulating inter-university co-operation and networking.

(b) The possibilities offered by these new technologies include notably:

(i) Distance education and training (extra muros) organized under co-operation agreements, designed for target populations in several countries, and dispensed by centres of excellence operating sub-regionally.

(ii) Satellite reception of existing programmes in the general schedule of TV5/Africa, some of which can be used for educational purposes and to back up the teaching of French as a foreign language. This particularly concerns universities in non-French-speaking countries, as well as countries like Madagascar where it is essential for all students entering university to satisfy that language requirement.

(iii) The future UNISAT programme, to be broadcast at night by TV5 to the whole African continent, which should begin shortly and will include high-level information on scientific progress, as well as back-up material for Doctorate studies in the fields covered by the UREF networks (health care, biotechnology, law, the environment, etc.).

(iv) The use for educational purposes of centres for accessing new computerized information media (e.g. videodisks).

(v) Access to high-level scientific and technical information through the interrogation of multidisciplinary data bases; in situ on compact discs, remotely on videotex.

(vi) The networking of French-speaking research workers in the South: the gathering, circulation and valorization of information through the creation of local and regional documentary data bases which can be accessed on line or in situ, in the form of printed directories and compact discs (REDOSI/directories of dissertations, theses and researchers, by subject area and specific subject).

(vii) Subsequently, as a preliminary to the final session given over to the study of the economic and financial implications of the use of NTIC for inter-university co-operation, at the request of a number of participants and to establish a common frame of reference for reflection and discussion, a recapitulative table of new technologies, placing them in the general context of distance education, was outlined.

(c) The following major ideas emerged from the discussion of new information technologies:

(i) Reference was made to a number of attempts to use NTIC and the various media that can be selected either for documentation purposes or as vehicles for the content of training courses, in order to highlight the merits and specific features of each of them, and also the risks and constraints they entail. Though the resources of informatics, telematics and audiovisual media make it possible to develop a more concrete, active and motivating form of teaching and learning, one must not underestimate the value of printed material, which is still the prime medium and the indispensable resource for clarifying the fundamentals of a course, for reading, and for critical analysis and reflection. Two obvious examples were cited:

(ii) The use of the new media for education and training (other than distance education, naturally) is justifiable only if it does not duplicate formal courses and lectures but serves as a useful complement to, and clarifies, them; and only if these media are mainly used to highlight the key points of a course, to catch up on a course, or to refer back to a complex course or curriculum, making use only of the unique and irreplaceable aspects of any additional information.

(iii) In response to a series of questions calling for further information, a brief reminder of the existing European context was given as an example, in order to illustrate clearly the trend towards adaptation to which higher education and research are irreversibly committed by reason of the profound technological, cultural and social changes occurring throughout Europe, given the increasing

pace of regional and international exchanges and the internationalization of research and training.

(iv) The participants' reactions clearly showed that they were on the whole fully aware of this European, and more broadly world-wide, phenomenon of rapid transformation and change, and that they were anxious not to be left on the sidelines.

(v) For this reason, invoking the conclusions and recommendations that had emerged from sub-theme 4 on regionalization and the networking of African universities, and the orientations of UNESCO's UNITWIN programme, several participants placed emphasis on a number of ideas which met with general assent:

African universities must, like those of other continents, and drawing on the latter's experience and head start in this field, take advantage of the possibilities and benefits offered by NTIC to:

- * Pool their skills and resources.
- * Exchange training contents and materials.
- * Structure themselves in large-scale regional units.
- * Create co-operation networks.

Only in this way will they be able to sustain a "standard level", remain competitive, and maintain contacts and exchanges on equal terms with the international scientific community.

It is urgently necessary to request UNESCO to form a working group involving voluntary and strongly motivated university authorities to examine the possibility of establishing, progressively and as soon as possible, a plan to equip pilot centres with NTIC facilities, on the lines of and as a complement to what has been done in French-speaking Africa by AUPELF/UREF. Priority should be given to universities and centres which meet the criteria established in the context of a UNITWIN project (for the regional networking of training and research networks, specialized and doctorate studies, and centres of excellence) and which consequently should be able to benefit from the resources provided for under these programmes.

It would be desirable for UNESCO to combine its efforts with those of inter-university co-operation bodies such as AUPELF and AAU, to call upon the expertise of specialized international organizations and universities to provide the African university authorities concerned with information on the techniques, available materials, and methods of distance education which have proved their worth in higher education and research, and to organize as soon as possible accelerated training seminars for the personnel of the pilot centres to be set up.

(vi) At this point, taking as a basis the document prepared for the Alexandria Seminar (DOC.CA/93/Egypt/Ref. 2), the participants examined in detail the costs incurred in equipping and operating an integrated resource centre modelled on a SYFED point like the one at Alexandria, making it possible to:

- * Provide a basic scientific and technical documentation.
- * Receive and use training programmes transmitted by satellite.
- * Provide access to advanced scientific and technical information.
- * Communicate with international research networks.

In examining these costs, consideration was given to:

- The financial, material and intellectual contribution which, depending on circumstances, the university or the reception centre selected should be able to make in order to become a "pilot centre" (provision, equipment and furnishing of premises, if need be payment of the cost of a specialized documentalist and a share of running costs, etc.).
- The contribution to be made by external sources of bilateral and/or multilateral aid (financing of equipment and facilities, their installation and maintenance, all or part of the cost of a specialized activity leader, running costs, documentation costs, etc.).

(vii) In the special case of SYFED centres and points, it was specified that:

- An agreement defining the conditions and forms of installation of equipment and facilities, together with the respective obligations of each of the partners, is signed between AUPELF and the relevant authority of the university or reception centre.
- The installation of equipment and facilities is accompanied on each site by the training of teachers and research workers in the handling of the instruments, and their familiarization with the new teaching techniques to which the latter give rise.

(viii) With regard to costs:

- (a) The cost of parabolic antennae to receive international television channels transmitted by satellite:

Reception of the TV5 channel, which is transmitted on band C by the inclined-orbit STATIONAIR 12 satellite, requires a 3.10 m to 3.70 m powered antenna, costing between 20,000 and 30,000 French Francs, depending on the country; though in some cases installation costs can double or triple this figure. But these costs may foreseeably drop appreciably in the coming months, thereby bringing this equipment within the means of more universities, by reason of the rapid development of the market in Africa and the possibilities of local manufacture which seem to be emerging - in Burkina Faso, for example. Furthermore, it is planned to change the satellite and the orbital position with effect from the end of March 1994; this will make it possible to receive TV5/Africa programmes with a fixed antenna of smaller diameter (2.40 to 3.10 m), raising the expectation of a 30% to 50% reduction in cost, depending on the country. The use of the France International channel is also possible, as is the use of the INMARSAT satellite which can transmit to Africa.

(b) The cost of designing and producing instructional material:

The production of instructional material incurs high fixed costs, but unlike traditional face-to-face teaching the cost of distance education falls as the number of students increases; hence the importance for Africa of examining the possibility of creating a joint centre for the production of instructional material on the regional and sub-regional scale.

The design and production of the instructional content of a distance education course (DEC) requires prior training and specific skills which, it has to be recognized, are still lacking in most African universities. So until they have mastered the techniques and methods of DEC and are able to produce instructional material adapted to their needs, they will have to rely on material produced mainly in the North.

On these two main points relating to costs, the participants expressed the wish to benefit from the expertise and support of UNESCO's International Programme for the Development of Communication (IPDC), whose Intergovernmental Council examines requests annually (this may entail quite a long delay in project implementation).

Recourse to IPDC expertise and support was felt to be useful because IPDC could, on the one hand, pass on information, for the benefit of universities which plan to equip themselves and are able to provide their own funds or seek funds from external sources, on all matters relating to new developments in equipment and the possibility of receiving satellite channels; and on the other hand examine the possibility of providing access - for the benefit of higher education and research - to the three regional

audiovisual production and training units to be set up shortly with the support of IPDC.

Implementation of specific projects at university level

The participants expressed the wish that certain experiments undertaken in various developing countries be taken as references to help to launch programmes of the same type in Africa.

Where the preparation of instructional material is concerned, an attempt should be made to ensure that African university teachers and research workers will not be mere consumers, but may be enabled, with the help of international co-operation, to become designers and producers of instructional material, thereby establishing South-North and South-South, as well as North-South, exchanges.

While recognizing the rapid development of distance education courses throughout the world, and particularly in Asia and Latin America, the participants paid tribute to the recent creation in Africa of an Open University which will cover the whole of the Southern region, and of a distance education centre in Swaziland.

It was proposed that the important scientific documentation available in CAMES should be put to more profitable use in the context of AUPELF's REDOSI base.

The participants expressed the wish that the specialized Regional Agricultural Centres (CRESA) established in the framework of UREF should benefit from the installation of SYFED points and receive the different satellite programmes. This would strengthen their network organization.

The University of TULEAR in Madagascar was seen as an example of an institution committed to the use of distance education technologies as a solution to the crucial problems of the increase in student numbers and the shortage of premises and qualified teachers. The experiment is proceeding successfully at the undergraduate level. The Centre National de Télé-enseignement de Madagascar (CENTEMAD) produces duplicated course material and exercises accompanied by answer sheets, distributed from 18 regional centres. This programme has had a positive impact in many respects, and has brought about substantial savings in grants and university social welfare. Neighbouring countries in the Indian Ocean should benefit in the long term from this Malagasy experiment, which deserves the support of the international community, and particularly of UNESCO.

LIST OF DOCUMENTS

Doc. CA/93/Egypt/1- List of Documents

Doc. CA/93/Egypt/2- Programme of work

Doc. CA/93/Egypt/3- Achieving a State of Readiness for Diversified Funding : Privatization

by University of Bradford Management Centre (United Kingdom)

Doc. CA/93/Egypt/4- Universities and Entrepreneurship

by Professor F.O. KWAMI, ex Vice-Chancellor, University of Science and Technology, Kumasi (Ghana)

Doc. CA/93/Egypt/5- Regionalization and the Establishment of Networks among African Universities

by Professor K.F. SEDDOH, Rector of the University of Benin (Togo)

Doc. CA/93/Egypt/6- The Policies of Financial Institutions towards African Universities

by Professor A. HENDAOUI, Rector of the University of Tunis III

Doc. CA/93/Egypt/7- Strategies for Change and Development in Higher Education

Paper prepared by UNESCO (Higher Education Division)

Doc. CA/93/Egypt/8- List of participants

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1. Presentation of the Objectives and Programme for the Seminar

2. Inter-University co-operation and new Information and Communication Technologies (NTIC)

3. New Initiatives of UNESCO for reinforcing Regional and International Co-operation in Higher Education

4. Development of Higher Education in Africa - the Dakar Seminar on the Restructuring of African Universities (19-24 November 1992).

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